Scouts Find Missing Oil Man's Body

SAN ANGELO, Nov. 24 (Spl). Body of Carl Buerbaun Jr., widely known Tulsa oil man, was found about 11 a. m. Sunday beneath a big boulder in the mountainous sector, 19 miles north of Kent. He had been missing from a deer hunting camp since Thursday.

The body was found by a two-member Boy Scout searching party composed of Tom Jones of Monahans and Jerry Sehon of Wickett.

From Rex Palmer, Field Executive of the Buffalo Trails Council, who led the search, came the above clipping and the following very encouraging letter. THANK YOU REX!

"I am taking time to write this letter to express my appreciation to you for the article 'A Child Is Lost,' which appeared in HEALTH AND SAFETY magazine.

"I had just finished reading this article when I was asked to secure a group of Boy Scouts to look for a lost hunter in the Davis Mountains, which are some 70 miles from my home. When I was notified, this man had been missing for three and one-half days. Hundreds of men, including experienced cowhands and trackers, along with men in airplanes, had covered every acre of the ground already. Since we had only a couple of hours to organize the Scouts and Leaders before dark, we made our plans to start our search at daylight, Sunday morning, November 24th. I had asked Scouts from our neighboring town of Monahans to participate in this hunt. By leaving at 3:15 on the morning of the 24th, we were able to start our search by daylight. Using your Staggered Method we strung out across the mountains for nearly two miles. Instructions were given to boys and leaders to investigate all canyon bottoms, and to pay particular attention to the base of all large rocks, where a man might fall. Two hours and fifteen minutes later two of the Scouts found our man, crushed to death by a large rock which had fallen on his head. We then built three large fires, to notify the rest that the man had been found. I later learned that at least twenty men in the past three and one-half days had passed within 25 feet of the hunter. Most of them had been on horseback and were unable to get their horses this close to the hole where the man was. It is my opinion that the man would still be there if we hadn't been using Scouts, with enough energy to investigate all the inaccessible places that men find easier to go around than to go in and back out of."

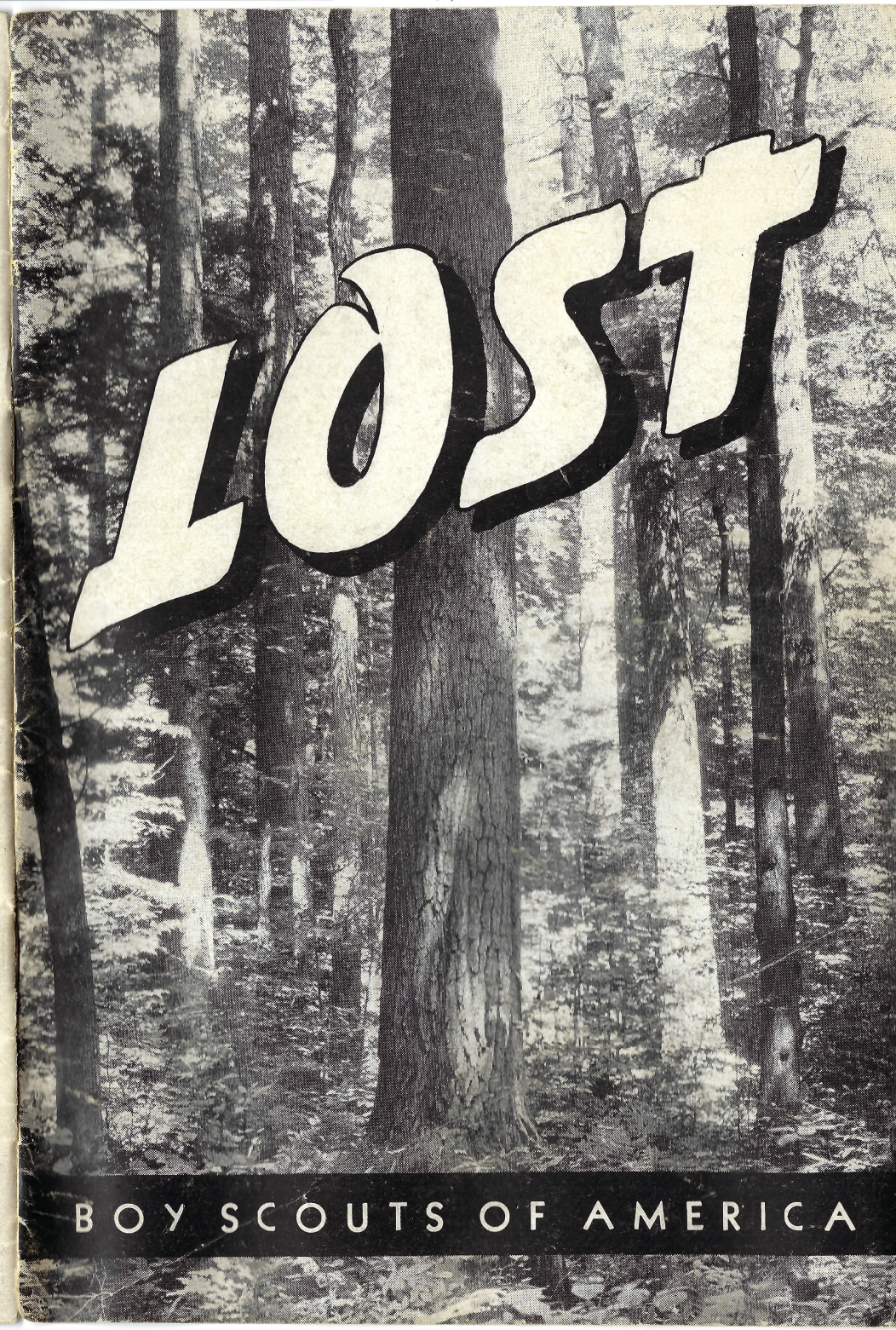

Photo by R. W. Johnston, Post-Standard, Syracuse, N. Y.

An eighteen-month-old Syracuse boy is securely cradled in the arms of Milton Kramer, Boy Scout. After an exhaustive twenty hour search, the boy was found by Scouts Kramer, Arthur Fellows, and Robert Beldoze, all of Troop 114 of Baldwinsville, N. Y.

LOST

BOY SCOUTS OF AMERICA

2 Park Avenue *New York, N. Y.*

Cat. No. 3019 50001150

LOST PERSONS

THIS pamphlet was developed by the National Health and Safety Service, in cooperation with the American Children's Fund, because so little authentic information on the subject was available. Scout Councils are frequently called upon to assist in this type of emergency service, for which the public has come to expect Scouts to be prepared.

In the first of a series of three articles on lost person searches, published in HEALTH AND SAFETY magazine in 1946, readers—including Federal and State law enforcement agencies and forestry organizations—were asked to aid in compiling more complete information. Many valuable replies were received. Help from the following persons and organizations is gratefully acknowledged:

J. Edgar Hoover, Director, Federal Bureau of Investigation • William Petty, District Forester, N. Y. State Conservation Department • Edgar J. Hickey, Commissioner, Connecticut State Police • F. Dale Petty, Captain, Oklahoma State Police • Charles H. Schoeffel, Superintendent, New Jersey State Police • E. F. Stenhouse, Captain, Rhode Island State Police • Homer Garrison, Jr., Director, Texas Department of Public Safety.

Scouter contributors, to whom we are also grateful, include: C. F. Bartlett, Syracuse, N. Y. • E. H. "Diogenes" Comstock, Monticello, Minnesota • W. W. Montgomery, Fort Smith, Ark. • Robert Perin, Kansas City, Mo. • James Rogers, Saranac Lake, N. Y. • Clark Schurman, Seattle, Wash. • E. K. White, Oswego, N. Y. • J. Hurley Hagood, Yakima, Wash.

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QUICK GUIDE For Organizing A Lost Person Search

FIRST, get a complete description, plus all facts that may bear upon disappearance *(See page 2)*.

SECOND, organize search crews —get trained men if possible— and appoint leaders. *(See page 2)*.

THIRD, decide and announce equipment, rations, signals, etc. to be used *(See page 3)*.

FOURTH, decide when and where to search *(See page 6)*. Use maps if available *(See page 16)* and use a search method which fits the terrain *(See pages 9-14)*.

BE PREPARED, train *NOW* for the search you may be called to later! *(See page 15)*.

"A CHILD IS LOST!"

FEW are the Scout Councils that have not heard these words, followed by a plea for help from police or parents. Because the Boy Scouts of America is well-known for its work in such cases, and because Scouts are supposed to be prepared for almost anything, requests for such aid are inevitable.

It is not always children who are lost. Frequently old people stray away, and become objects of long and fruitless searches, whereas youngsters are usually found alive and in surprisingly good condition. Lost hunters and persons missing in the mountains are special problems, and only occasionally are Scouts involved in the effort to find them.

Every possible effort must be made to find the missing person before he suffers serious harm. That will depend upon the searchers' knowledge of the country, their ability to start the search at the right time, good leadership, a plan of organization, and the previous training of the searchers. Before going into details of search, let us consider a few of the very important points learned from studies of *lost person* cases, which should always be kept in mind.

Youngsters — even infants — seem to come through such experiences better than grown people. In 1938 a thirteen-year-old Scout was lost in Maine's Mt. Katahdin wilderness for nine days, but came out in relatively good condition. In the same year, a hunter many years older, but still a young man, killed himself in a frenzy of fear and despair, after having been lost but a few hours. Infants under five years of age have been lost for several days, and found in better condition than their agonized parents.

Fear of the unknown seems to increase with age, and this fear, and the panic which often accompanies the realization of being lost, is a factor to be reckoned with. Lost persons have been known to hide in fright from their rescuers, or to run away at their approach. Such unreasoning action may have been caused by uncontrollable terror or by shouts of searchers trying to keep in touch with each other.

Young children are more likely to stay on beaten trails or roads than are old people, who often wander aimlessly or change direction for no good reason.

Searchers are by no means im-

mune to fear and superstitions, and sometimes seriously slow up the search. This is one of several reasons why night searches are not recommended in thickly wooded areas.

The circumstances leading up to the disappearance must be known. When a young child or very old or infirm person is missing, it is reasonable to assume that his disappearance is not deliberate. Pertinent information should be obtained without delay from the family and whoever last saw the person.

When the lost person is neither aged nor a small child, the knowledge of conditions at home, or of his financial affairs may suggest a reason for the absence and a hint of what may have happened, and perhaps even where to search. Business difficulties, mental illness, despondency, family quarrels, thwarted romances — these factors, when known, may help to clear up a seemingly mysterious situation.

The name, age, and physical appearance of the individual, including clothing worn, must be learned at once, and that information given to all searchers, who should write it down for reference.

The Commissioner of the Connecticut State Police states: "First and foremost, it is extremely important that a very calm and level-headed person be assigned to visit with the person who has lost the child. It is remarkable how much helpful information the right person can secure by calming and reassuring the person who had charge of the child."

LEADERSHIP AND DISCIPLINE

Because of their authority, experience, and knowledge of the country, police, or State or Federal forest rangers, or game wardens are the logical leaders of lost person searches. But even when such men are available, it is desirable to have supplementary leadership. It is particularly important to place Scout groups under the charge of leaders who know and are known to each boy, and so are able to use the Scouts to the greatest advantage, provide the necessary care for them, and maintain proper discipline.

Captain Petty, Oklahoma Highway Patrol, suggests "that more emphasis be placed on leadership and proper maintenance of discipline among the searching groups. . . . Considerable disunity results when discipline breaks down, and causes unwarranted confusion among various organizations comprising the searching party."

Says the Chief of the Maine State Police: "You should only employ in your searching party members of organizations who are used to hardships and discipline.

This would include police, soldiers, game wardens, *experienced* woodsmen, *experienced* members of the Boy Scouts and similar organizations. This is necessary because inexperienced people will select the easier walking, and will not hold to the direct line which you have given them. Therefore, the area will not be properly covered. Many lost persons have been located in a given area after it had been 'combed' by so-called searching parties."

The leader chosen to direct and lead the search, should select his assistants. If the country to be covered is open, few group leaders will be required; but if it through heavy cover or over rough country, then leaders should be assigned to each fifteen to thirty searchers.

Besides group leaders, there should be runners to communicate between the director of the search and the sections, if there are several, and between sections.

The director of the search should brief the entire group, giving a description of the lost person and such other information and instructions as he wants them to have. Each group or section should then be questioned by its leader, to determine whether the instructions are clear.

The director must impress upon the searchers that it is *they* who must find the lost person, rather than the lost person find them. Although there may be a call for help or some other signal from the one being sought, nothing of the kind should be expected; he may be exhausted or unconscious.

A roster of the entire search force should be made up. Each group leader must keep a list of the people under his leadership and check occasionally if need be. The buddy plan — that is, each searcher has a partner at all times — is a very desirable plan to follow.

Signals must be agreed upon. The use of whistle signals between leaders, instead of shouting, is preferred by several authorities. However, *the calling out of the missing person's name* at frequent intervals, using a portable amplifier or a megaphone, is considered a good practice.

Call out the missing person's name at frequent intervals.

In regard to whistles, the Maine State Police say: "To hold a searching line straight, it is sometimes an advantage to have every fourth or fifth man equipped with a mouth whistle, which is blown at given intervals. Whistles are also helpful in other types of searching. When whistles are used it is not necessary for the searchers to keep hollering at each other."

Here is a check list of necessary or desirable equipment:

Maps of surrounding area
Signal devices
Rosters of search parties
Meals; emergency rations
Flashlights
First aid equipment
Compasses
Ropes
Knives and small axes
Blankets for lost person when found

In regard to the mobilization and organization of Scouts for searches, E. K. White, when Scout Executive of the Anthracite Council at Hazelton, Pa., had an arrangement with schools to release Scouts for searches, but never called them out except upon request of the State Police. About organization, Mr. White says:

"1. Make a roster by Troops of all Scouts reporting and check them when they go home.

"2. Have them bring lunch if possible — otherwise use emergency ration bars. Trying to feed centrally takes a lot of time off the search.

Send a pair of watchers to guard each danger point.

"3. Have a pre-arranged recall signal if possible, one that can be widely heard. (On our last hunt the body was found in thirty minutes; we had a colliery whistle blown for the recall.)

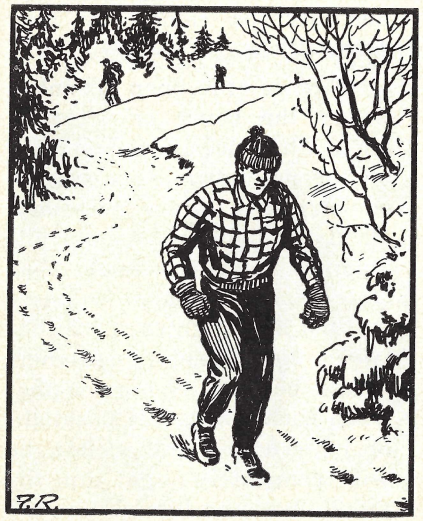
"4. Have a headquarters that is manned at all times, which has a record, with map, of where each unit was dispatched.

"5. Have Troops, or Patrols, work as units with definite and acting leadership."

One of the first protective measures to be taken, even at night, should be to send watchers in pairs to all danger points (cliffs, ravines, cut banks, quarry holes, mine shafts, sink holes, bogs, swamps, etc.). In a great wilderness country such as that in Maine, where Scout Fendler was lost for nine days in 1938, and Scouts Davis and Atkinson for

five days in 1941, such a coverage of danger points would be impossible. In those two searches few Scouts were used, for the country was sparsely settled.

In trailing on snow, no more than four persons should constitute each actual search party; one to track, and three others to carry food, clothing, and first aid equipment, and to transport the lost person when found. The tracker should go in front, and the others stay well back within hearing distance, in single file, so that they will not mess up the trail if the lost person has circled and crossed or recrossed his own tracks.



When trailing on snow, the tracker goes ahead.

Dogs should be kept leashed.

DOGS?

Unless they have been trained to follow human scent picked up from shoes or clothing, dogs are of doubtful value. If used, they should be kept leashed and handled by their owners.

In many instances, dogs have been used successfully, says the Commissioner of the Connecticut State Police, who adds:

"In searching open country and wooded area, not only trained bloodhounds have been used with success, but ordinary family dogs have been employed. In some instances excellent results have been obtained, for the family dog, in thrashing through brush and coming upon a lost child, will immediately begin to bark or will remain with the child, thereby assisting the searchers."

The Rhode Island State Police report:

"We have used bloodhounds for eleven years and with them, have found a great many persons after dark. We send our dogs out immediately upon request, whether it is day or night. In extremely hot weather, if daylight were awaited, the heat might obliterate a scent. When searching parties are used, we find a 'skirmish line' search very successful."

WHEN TO SEARCH— SELDOM AT NIGHT!

Only under exceptional circumstances should searches be carried on at night. In wooded or brush-covered country, where the cover is thick or high, (corn and wheat fields would be in this category) a sleeping or unconscious person might not be seen. Night searches in such territory should never be conducted unless the ground is covered with snow deep enough to show tracks clearly.

If there is no snow on the ground, do not start a search until there is sufficient daylight to see everything. Night time may be used to recruit, organize, prepare (have each man equip himself with rations for his own use), and brief the party, so that the searchers will be ready at daybreak. Dogs may be secured and given the scent and made ready to take off with their handlers as soon as daylight is sufficient to make clear vision possible.

As previously pointed out, "Searchers are by no means immune to fear and superstitions, and sometimes seriously slow up the search. This is another reason why night searches are not recommended in wooded areas."

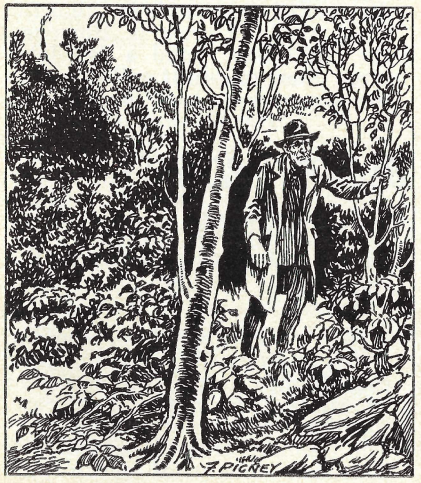
Other reasons for not conducting the search in darkness are: (1) trees throw long shadows and the searchers might pass within a few feet of a lost person without discovering him, unless he cried out; (2) even in rural communities, relatively few men are good woodsmen; at night they are likely to be nervous, unsure of themselves, and perhaps ridden by local superstitions.

Searches in open country, where the cover is not high enough to conceal a person lying on the ground, may be carried on at night when necessary. Plenty of lights must be available and searchers should keep close enough together so there will not be unlighted spaces between them. That is, searchers should be close enough so that when each swings his flashlight or lantern to right or left, he will completely light up the ground between himself and the lights of the men on his right and left.

WHERE TO SEARCH

Speaking of a successful search in northern Minnesota, "Diogenes" Comstock says:

"Before the boy was found, I was talking to an old woodsman who claimed that he had searched for many children lost in the North Woods, and in his estimation the first thing to do was to thoroughly cover every trail leading away from the place where the child was last seen. His reasoning was that as the child started into the woods, the going would keep getting harder and harder, and the child would naturally shift his course and parallel the trail. He predicted that this boy would be found within two hundred feet of some trail, and claimed he never searched more than that distance away from some trail. He would first divide the searchers available into parties of some twelve to twenty, and send them out over every available trail to search the two hundred feet on either side."



Aged persons are likely to wander away from the trail.

After three days of searching, the child was found *on a trail* watching a search plane flying overhead. Sure enough, he had never been more than 200 feet from that very trail.

Says the Commissioner of the Connecticut State Police:

"In searching for children, the immediate area where the child was last seen should be carefully explored, also such places as closets, open spaces beneath porches, out-buildings and vehicles of all sorts, in particular the under portions of same."

Thus, though the pattern of travel may be different for every lost person, children are likely to follow roads or visible trails. This seems particularly true where lost children are familiar with the country and are not afraid of their surroundings. Unfortunately, the opposite is usually the case when an elderly person is lost.

"In the past five mobilizations we were successful twice," says E. K. White, "We found a six-year-old boy alive, and the body of an elderly man.

"In the case of an elderly person," White advises, "forget logic and drag the area. One man we looked for thought he was in a different town altogether when he started walking. Sometimes an elderly person will, for some real or fancied reason, try to hide.

"Look in the least likely places!"

The theory that children are likely to follow traveled routes may not hold in cases where they are terrified by wild animals or vicious dogs — real or imaginary. Robert Perin, former Scout Executive at Safford, Ariz., and now on the National Staff, tells of one little panic-stricken city boy who ran many miles in a few hours, as a result of being frightened by a coyote. To children, too many animals resemble the child-eating beasts of their storybooks.

The Chief of the Maine State police makes three very pertinent points:

"When thickly wooded areas are searched, all trails leading out of the area should be covered constantly. Lost persons often follow these trails and range many miles from where they were originally lost.

"This brings up the question of how great a distance one should cover these trails. We have found that if the trails are not unreasonably long, they should be patrolled to where they come out into open country. We have learned from experience that many people lost in the woods are found from ten to fifteen miles from the point where they entered the woodland. Some have traveled even greater distances. We have always felt that the Scout who was lost on Katahdin in 1938, would have been found within a few days if we had extended our patrol to fifteen miles on the very first day.

"Never overlook the fact that infants and elderly people may travel long distances over difficult terrain and under adverse conditions. They will also ford streams

Young city children may bring story book ideas with them to the country.

and go over other natural barriers which you would not expect them to. We had a young child cross a stream ten feet wide with the water a foot deep. The search was stopped at the stream because the director of the search felt that the child wouldn't cross it. However, the child was found a day later more than one-half mile beyond the opposite bank of the stream."

BLIMPS-PLANES

From the Chief of the Federal Bureau of Investigation came the following:

"Get the help of blimps from the Army or Navy. In one kidnapping case, blimps located the bodies of the subject and victim of the case, together with important evidence. The desolate area to be searched consisted chiefly of scrub pine growth and heavy spruce swamps. The undergrowth was so dense as to make it impossible to see more

than thirty yards. In some instances searching officers could scarcely see each other at a distance of ten feet. A United States Navy blimp was secured from a Naval Training Station. FBI Agents and State Police officers were lined up ten yards apart. At each end of the line was an officer with a walkie-talkie in direct radio communication at all times with an officer in the blimp, who likewise was equipped with a walkie-talkie. The officer in the blimp, in addition to being in an excellent position to search the area, was also able to assist the ground searchers in keeping their line dressed, inasmuch as he could communicate with either end of the line by walkie-talkie. The slow speed and low altitude at which the blimp was able to operate (100-200 feet above the ground) made it easy to scrutinize the landscape closely. Binoculars enabled the blimp officer to make out the smallest details of articles lying on the ground. Using the walkie-talkie, and by directional pointing, the officer and crew of the blimp were able to guide the ground searchers to the bodies and evidence.

"Low Speed planes have been used to good advantage in searching certain types of terrain.

"Inexperienced Citizens. In numerous instances well meaning citizens volunteer to assist in the search. Because of lack of experience, their efforts may tend to retard the entire search unless properly coordinated. It is suggested that a law enforcement officer, Scout leader, forest ranger, or other qualified person be strategically spaced in the search line between inexperienced citizens. This might tend to control and coordinate the entire line of search.

"Signaling Devices. There be some type of signaling device between the leader or coordinator, and the group leaders, in order that the line of search may be started or stopped at any given time. Police whistles have been been used to good advantage."

HOW TO SEARCH

Four methods of searching are described here, any one of which should produce successful results, if the lost person remains within the area covered, and if the searchers are thorough, well disciplined, and courageous. It takes courage to go ahead at times.

The difficulty but absolute necessity of keeping searchers in a line is well-known to all who have conducted or taken part in a search. The use of compasses by men on the flanks, or the man in the center, if the line guides on the center, is almost essential. It is a surprising fact that groups of as many as twenty men, working without the aid of a compass, may alter their course as much as 45 degrees within a distance of one-quarter mile. When one or more compasses are not available, it will be necessary for the guides to "bee-line" by sighting on trees or objects to the front and rear as they move forward.

Of the four methods, the Straight or Abreast Line formations of searchers seem most liked. Then comes the Staggered, Diagonal, and Radial.

ABREAST LINE

The description of the Abreast Line Method of search is a part of a very comprehensive and important statement forwarded by the Superintendent of the New Jersey State Police. The statement is quoted herein in its entirety. It was compiled from suggestions made by commissioned personnel and men at the State Police Training School after having read "A Child Is Lost" — the first article of the "Lost" series which appeared in HEALTH AND SAFETY. Lieut. W. T. Gardner, Commandant of the school, edited the material and forwarded it to the Superintendent.

"Training School Thoughts On 'A Child Is Lost.'

1. COMPLAINT OF LOST PERSON

a. Full and complete description, if accompanied by dog, this information should be included as well as its description. Keep in mind, insofar as clothing is concerned, that outer garments could be discarded.

b. Where last seen and by whom — if unknown, possible objective.

c. If an adult — mental condition — amnesia — despondent.

d. Objective of person — hunter — hiker — berry picker — camper — picknicker, etc.

2. ALARM

a. Alarm to Police Departments, teletype, radio, newspapers.

b. Alarm to people living in vicinity where person was last seen.

3. ORGANIZATION OF SEARCHING PARTY

When alarm has been broadcast, volunteer searchers should be assembled; they may consist of Boy Scouts, Volunteer Firemen, members of Veterans' Organizations, etc. The organization and direction of their efforts should be under one head — preferably a police official.

4. MAPS

If area is extensive, it would be advisable to obtain maps, so as to outline territory to be searched. This may quickly be accomplished by contacting any of the following municipal officials in whose area the person is lost.

a. Police Department.
b. Mayor or Township Committeeman.
c. Tax Collector.
d. Borough or Township Engineer.
e. County Clerk.
f. County Engineer.

5. FIELD HEADQUARTERS

Field headquarters to be set up if possible in center of area to be searched, or near a telephone. It should also be accessible by road, in the event it is necessary to summon an ambulance.

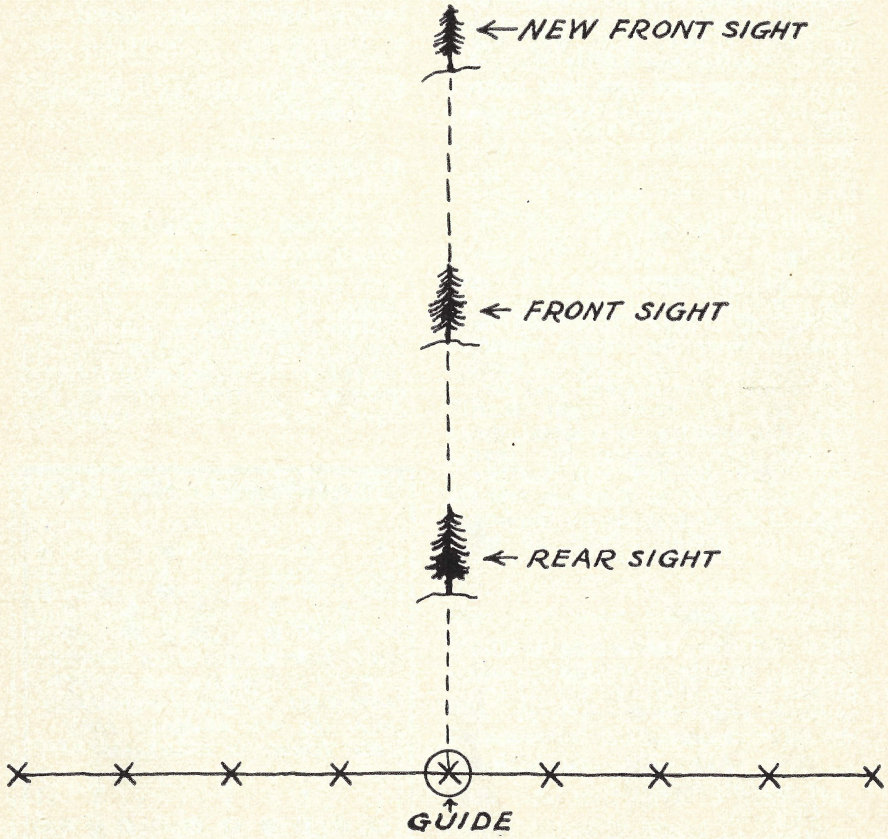
6. DIVISION OF SEARCHING PARTY

When volunteer searching party has been assembled, the official in charge should divide the party into groups of about ten with one designated as the group leader. Each group to be numbered 1, 2, 3, 4, etc. Each group leader to record the names of members of his group. The person selected for the position of group leader should be acquainted with the terrain to be searched and should preferably be a police officer, game warden, or a native of the particular area.

When volunteers have been divided into groups, the official in charge should issue verbal instructions covering full information regarding the missing person, and method to be used in the search. Special attention should be directed to the group leaders as to their responsibility. NOTE: *This will have the effect of making each man more alert to his job.*

7. DIVISION OF AREA TO BE SEARCHED

With maps previously obtained the official in charge should mark off a section with colored pencil, and designate this as ZONE 1, and assign same to GROUP 1, for search, carefully outlining the boundaries, with instructions that when this Zone has been searched, the group is to return to Field headquarters for another assignment. Mark off ZONE 2, and assign to GROUP 2, for search. Continue with this procedure until all groups have been assigned a zone. The first group to complete search of their zone will return to Field headquarters and be assigned an-



The Abreast Line guides on the center man, usually the leader.

other zone. This method makes for a business-like search, and also provides a simple record of WHO searched WHERE.

8. METHOD OF SEARCH

The three methods of search described as Gridiron, Diagonal and Staggered each have their value, depending on the area to be covered; however, the following 'Method of Search' is believed to be superior where a large wooded area is to be covered. When searching over a large area it is suggested that each group form an 'Abreast Line.' Group Leader to be in the center, all men instructed to guide center. This way the Group Leader has better control over his men and can hold them in line. The interval between each man, of course, will vary according to the terrain. In the event the search is for a *small* child this distance should not exceed 25 feet especially in a thickly wooded area. It must be kept in mind that the key man (Group Leader) must aim his course so as to avoid the possibility of his group wandering off course. This may be done by selecting objects ahead, such as a tree, to march on. First tree would be rear sight, and farther tree the front sight, then when the first tree is reached, the farther tree becomes the rear sight, and another still further tree is selected as the new front sight. If all men guide on the key man the group cannot go off course.

9. EQUIPMENT

This will vary according to the terrain, weather, visibility and person being searched for. If the occasion requires it, each group should have one of the following:

a. First Aid Kit (including snakebite serum).
b. Compass.
c. Rope (to raise or lower victim).
d. Knives or small hatchet (for possible use in cutting poles to make improvised stretcher).
e. Blanket (to wrap victim in the event he may be suffering from exposure).
f. Signaling Devices.
   (1.) Whistles.
   (2.) Flashlights.
   (3.) Firearms (group leader only).
   (4.) Signal Flags (Boy Scout).

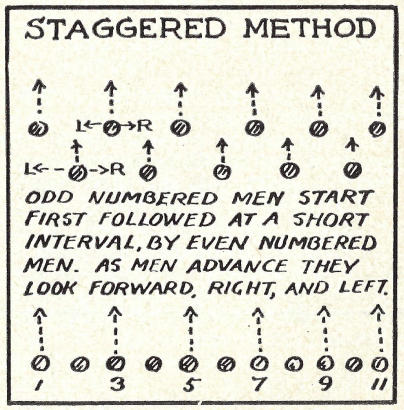
10. SPECIAL EQUIPMENT

In New Jersey the following have been found to be very useful:

a. Helicopters — powerful binoculars.
b. U. S. Navy Blimps — powerful binoculars.
c. Bloodhounds.
d. Mobile electric light units.

11. COMMUNICATIONS

Before the groups leave to search their particular zones, instructions should be issued by the official in charge regarding a communication system to be used in the event the person is located, or it is found necessary to recall groups. The signal system selected should be as simple as possible, and may consist of a designated number of whistle blasts, or shots fired by the armed group leader. If the terrain is hilly, vantage points may be selected, and communications carried on by Boy Scouts using signal flags. If the police in the area are equipped with radio cars this means should be used. If a walkie-talkie is available it can be of great service, too. Likewise, portable loud speakers can be used advantageously."

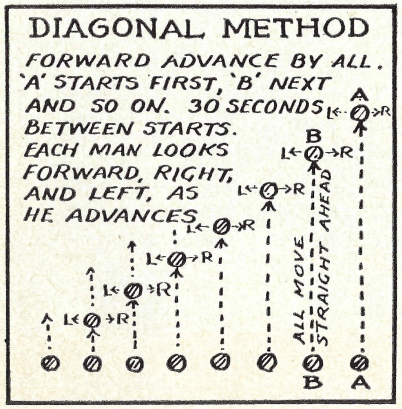


Captain W. J. Coughlin of the New Jersey State Police adds:

"Leadership: Should include experienced gunners and trappers who have been over the ground several times.

"Methods: Before any method is adopted, a check should be made around the edges of probable areas to be searched, for tracks that might show possible means of entrance.

"Observers or watchers should be stationed around all edges of the area being searched, particularly along roads in the direction or path the searching party is traveling.


DIAGONAL METHOD
FORWARD ADVANCE BY ALL. 'A' STARTS FIRST, 'B' NEXT AND SO ON. 30 SECONDS BETWEEN STARTS. EACH MAN LOOKS FORWARD, RIGHT, AND LEFT, AS HE ADVANCES.
ALL MOVE STRAIGHT AHEAD
A
B
B
A

"Volunteers should be prevented from conducting well meant preliminary searches, thereby making false tracks."

In the "Staggered Method," the searchers advance on a straight front in two parallel but staggered lines. The second line is from 50 to 100 feet to the rear of the first, and so arranged that men in that line do not follow in the tracks of those ahead, but cover the intervals between the men ahead. The men in the second line cover the ground not covered by the first line, and at the same time observe everything to right and left, double checking the first line.

In the "Diagonal Method," the party moves on a diagonal front. The searchers spread out on a straight front, say on a road running east and west, facing south, the direction in which they are going, with a distance between each man of 50 feet, more or less, depending on conditions. At the signal to go, the man on the right (or left, as decided earlier) moves forward toward the south. Thirty seconds later, the next man moves out, also facing south. Every thirty seconds, the next man in line follows until all are under way, moving forward on a diagonal front. If there are irregularities of terrain, each man will have to guide the man diagonally ahead of him occasionally, in order to keep for-

mation and distance. The advantage of this formation is that each successive man, as he moves up, is able not only to look over the ground which he is expected to scan, but he is also able to get a second look over the territory passed over by the man diagonally ahead of him.

The "Radial Method," is a favorite of Indians in the Southwest. It is used in searching a rolling, relatively treeless country, where visibility is good. A long straight line, with searchers several hundred feet apart, rotates around the axis. Those inside must move slowly, while those outside must move rapidly to keep up.

FOUND!

When the lost person is found alive, three factors determine the protective steps to be taken. They are: (1) The length of time without food or shelter; (2) the time of year, and (3) his stamina.

Certainly the victim should be fed moderately and moved to shelter as quickly as possible. If in a weakened condition, he should not be permitted to walk, but should be wrapped up and carried on a litter or in a vehicle.

A considerable degree of shock can be expected. Essential first aid should be given at once, followed by medical attention as soon as can be arranged.

If the lost person is not restrained, hunger may cause him to overeat, with possible serious results. If he has been without food only a few hours, the feeding should be slow, but can be generous. It is best to give him food a little at a time, but frequently. If he has been without food for several days, he must be literally spoon fed for a time, then the diet may be gradually increased under observation in a hospital or at home under a doctor's care.

If the lost person is dead when found, the body should be covered without being moved, and a messenger sent for a police officer or the coroner. Until one or the other arrives, a guard should be posted.

If found in water, the body should be brought ashore at once to establish whether life may still exist. It must be assumed in such a case that until examination proves otherwise the person is alive, and that he may be saved if artificial respiration is applied. It is entirely possible that submersion preceded the arrival of rescuers by only a few minutes.

TRAIN 'EM NOW

RELATIVELY few of the volunteers who will offer to help search for lost persons will be skilled in such tasks. Men and boys who are physically fit, trained in observation and woodslore, in complete control of their emotions, and dependable, are best for such difficult tasks.

These would include police, experienced soldiers and ex-soldiers, forest rangers, and Scouts. Because observation, tracking, and trailing are a part of the Scout program, it may be assumed by people of a community, that these things are done well by Scouts. They will look to Scouts expec-

Number one essential in maintaining a systematic search is a good compass. Few people understand its purpose, use, and frailties. So, much training with the compass is necessary.

tantly in time of need. There is nothing better — except experience — than observation and stalking games to teach Scouts to be effective in searching for lost persons.

Scouts will be expected to know the surrounding country because it is their field of play, and because mapping it and hiking over it are parts of their program, Councils should provide all possible encouragement and aid to Scoutmasters, Scouts, Patrol Leaders, and Emergency Service Corps of Senior Scouts to improve their knowledge of the surrounding country. This can be done best through hikes, compass and mapping contests, and treasure hunts.

MAP YOUR TERRITORY

The making and marking of maps is a project for Senior Scouts and Emergency Service Corps members, and maps should be made now, against the time of need. Every unusual feature of the land which might become a hazard, such as cliffs, ravines, cut banks, quarry holes, mine shafts, sink holes, bogs, and swamps, should be shown. Points on rivers, lakes, or streams where a lost person might stumble into deep water in the dark should be indicated on all maps.

Such projects, divided among Districts, create programs of interest and great value.

GET OUT AND SEARCH

The best training for a lost person search is a "lost person search" — with the "lost" one being a good dummy made of rags or wood. Hide the dummy in a patch of woods — or any place where a child might get lost. The area to be searched should not be so large that more than an hour is needed.

With the dummy planted, call your mobilization, but don't start the actual search until you have it thoroughly organized — that is: search crews formed, briefed, equipped, and under leaders who you know are capable of giving good leadership and maintaining good order.

One of the most valuable lessons that will come from this interesting event will be that of maintaining direction — with the aid of the compass (several compasses are better)—and a straight line. Organization should be as realistic as possible.

Conduct the search quietly and orderly. Remember, lost persons often run in terror from the noisy babble of searchers!

Here is the story of a "search" conducted by the Old Colony Council of East Walpole, Mass.; it was originally published in HEALTH & SAFETY Magazine for December, 1947, and is reprinted in shorter form here:

OPERATION MISSING PARACHUTIST

By R. W. Speirs, Scout Executive, Old Colony Council

One cold January afternoon twenty-three Commissioners of the Old Colony Council gathered at a cabin in the woods. HEALTH & SAFETY magazine articles on searching for missing persons were studied. Then, with blackboard and chalk, methods of searching the woods were analyzed.

When everyone had good paper knowledge of searching, we went into the woods to work it out. A practice search gave each Commissioner a chance to see the "bugs" and to learn how to correct them.

The Commissioners then went back and relayed the techniques to Scoutmasters. About 80 per cent of the Scoutmasters and Assistant Scoutmasters got out into the woods for practice hunts. It's one thing to talk about it; it's another thing to do it. The Troop leaders made up all sorts of dummies, which added fun to the searches.

While searching, main points were stressed, such as not bunching up, keeping lines intact, etc. We always used the *double line* (staggered) method.

With all the leaders thus oriented, we planned the big OPERATION MISSING PARACHUTIST for the boys. The Health and Safety Committee obtained Geodetic Survey maps of every town in the Council. These were sold to Troops so that every Troop had four copies, one for each Patrol. The maps were gridded in half-mile sections. North was lettered, West numbered. Thus, in sending a message to one Troop, we could say "assemble at the church on 4B of the Canton quadrangle."

Troops used these maps to accumulate any information that might be of help in searching their sections. Danger spots and densely wooded areas were marked.

Next, the District Committeemen went into action. They took the maps of the District and picked a two-mile square section they would like to use of a trial search. This square was then roughed out on the map. At the meeting of the Council Health and Safety Committee, the date and hour of the mobilization was planned. Then members of the Committee who owned planes mapped out their routes around the Council.

The Sharon Council of Girl Scouts did a splendid job in making the "missing persons" for us. These were burlap bags stuffed

with crumpled balls of newspapers, and with arms and legs sewed on. They were light enough not to damage anyone they might hit when they "bailed out."

The great day arrived!

The aviators of the Health and Safety Committee flew over the woods and dropped seventeen dummies.

Districts mobilized — *Commissioners calling Scoutmasters: Mobilize your Troop at 4F, the gas station in the Wrentham quadrangle. . . . Mobilize your Troop at 8A in the Weymouth quadrangle.*

At every assembly point Commissioners took charge of the Troops, and in every section most of the "lost parachutists" were found. Out of seventeen who "bailed out," there are still three in the woods, "starving," and baffling the best efforts of two Districts to find them.

"Operation Missing Parachutist" was a great success, good training, and lots of fun. We're going to try it again.

IF YOU ARE LOST—

HERE'S WHAT YOU DO ABOUT IT

EVERY big game hunting season, more than one native son, as well as a few "sports," — and perhaps even a few smart guides — have discovered that camp has unaccountably changed its location in the past few hours. As one who went through such an experience for thirty-six hours one cold Maine winter, this writer can speak with understanding.

As the late Horace Kephart put it, to be completely "bumfuzzled" about one's whereabouts is neither a disgraceful nor an unusual experience, even for experienced woodsmen. He summed it up very neatly, as follows:

"In the school of the woods there is no graduation day. What would be good woodcraft in one region might be bad bungling in another. A Maine guide may scour all the forests of Northeastern America, and feel quite at home in any of them; but put him in a Mississippi cane-brake and it is long odds that he would be, for a long time,

'Perplexed, bewildered, till he scarce doth know
His right forefinger from his left big toe.'

In the course of their Scouting experience, boys will spend much time in unfamiliar country, where a slight change of direction may cause them to lose themselves. Ways of preventing such incidents are presented here with suggestions on what a boy — or man — can do when lost, and what Scoutmasters and Camp Directors should teach them to do.

Imparting such knowledge should be routine in every Scout Camp—be it a big Council Camp or a small Troop Camp.

A sketch map (not necessarily to scale) of the country he is in, showing roads, streams, hills, swamps, lakes, etc., should be in every camper's possession at the end of the first day in camp. And, he should have made the map himself from a master sketch map carried by his Scoutmaster or instructor.

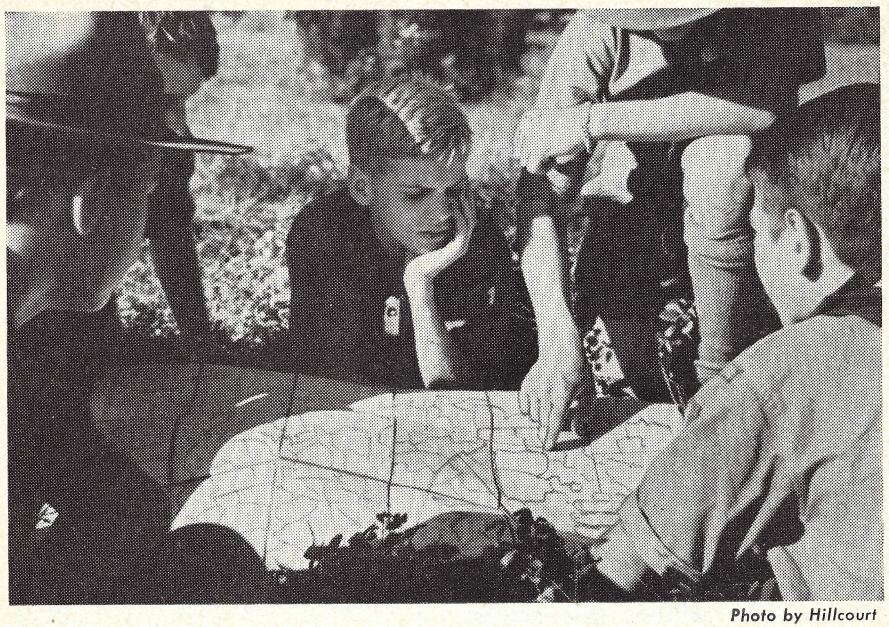


Photo by Hillcourt

How to orient himself to his surroundings should be an essential part of every Scout's training. Scoutmasters and leaders at Council Camps must teach Scouts to make rough sketch maps before going into unfamiliar territory, and how to use maps and compasses for orientation.

"And a southern cane cracker would be quite as much at sea if he were turned loose in a spruce forest in winter. But it would not take long for either of these men to 'catch on' to the new conditions, for both are shifty, both are coolheaded, and both are keen observers."

Mr. Kephart wrote much more on the subject and is widely quoted. The following, touching on mental attitude, is quoted here because of its importance:

"When a man fixes up his pack and strikes out alone into strange woods, just for a little adventure, not caring where he may come out, he may be lost all the time in one sense, but in a better sense he is at home all the time. Not for a moment does he worry about the future; he is exploring new territory — that is all.

"But if one sets out for a certain destination, expecting to reach it by a given time, and loses the trail, he will be anxious at once, and the longer this continues, the more it will get on his nerves. Still we would hardly call him lost, so long as he retains a good idea of the general direction in which he should travel.

"A man is really lost when, suddenly (it is always suddenly), there comes to him the thudding consciousness that he cannot tell, to save his life, whether he should go North, East, South or West. This is an unpleasant plight to be in at any time; the first time that it is experienced the outlook will seem actually desperate."

2 SCOUTS LOST-WHY?

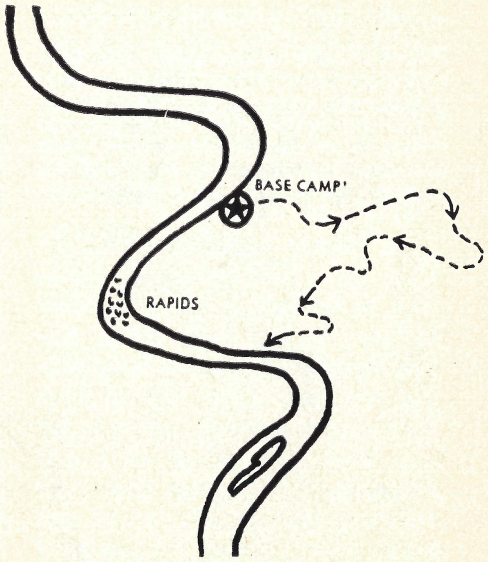
A camp director once poured into the ears of this writer a seething criticism of two campers who were lost for three days. These Scouts decided to do a little exploring on their own and left camp without permission. In their wanderings, they crossed a mountain stream, two highways and a railroad. It did seem strange, as he pointed out, that they did not follow any of these to habitation. He admitted, however, that *no instructions on what to do if lost* had been given to any of the boys in camp, nor had they been shown a map, or been otherwise oriented to the country in which they were camping. He agreed that such instruction was a part of the Scout program which should be taught, but he still termed their "stupidity" as inexcusable.

There are two fundamental rules, easy to follow, which can lessen the chances of your being lost — or lessen your danger if lost. Those rules are: ONE — know the country where you are camping — and TWO — carry survival equipment.

RULE ONE — Orientation — Make a Map — Get acquainted with the country you are to camp in.

Applied to Scouts, this means to show them an accurate map of the territory in which their activities are to be carried on. Point out natural features, and establish a base line. From this map they can then make their own sketches which will indicate the base line, ridges or mountains, streams, lakes, swamps and wooded and cut or burned over and treeless land, etc.

The explanation of a base line in the U. S. Navy's book, *How To Survive on Land and Sea*, is so clear, it is quoted:



The River is the base line.

"If you have a more or less permanent camp site and want to explore unknown country, establish a base line at right angles to your intended reconnaissance direction. Any continuous line such as ridge, escarpment, range of hills, streams, seashore, or line of blazed trees or bushmarks will serve.

"Explore the base line for several miles in each direction, noting characteristics you can remember so that you will know your approximate location on it when you strike it again. With a base line established, you can leave camp in search of food or water with reasonable assurance that you can return. As an example, let's assume that you are camped on a seashore. You leave camp, headed west in search of food or water. You know you have to go east to get back, but on your return you may veer from your course and strike the beach well above or below your camp.

"If you have explored the beach for several miles each way from camp, you'll know whether you're above or below camp, and can travel back in the right direction. If you haven't established a base line, you may go several miles in the wrong direction hunting camp and then have to retrace your steps. You may cover ten or fifteen miles in getting to a camp only three miles away."

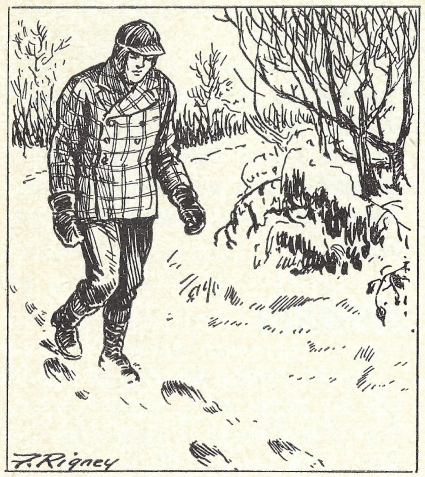
To become acquainted with the base line, a hike should be organized to explore it for a specified distance of say three miles. Advise Scouts to memorize outstanding features. After this is done they can be given a chance to try out their observation skill. For example, if the base line runs east and west, Scouts can be sent north with a leader for ten minutes, and then be given twenty minutes to get back to the starting place in pairs without the leader. This very simple project could later be made more interesting by using a treasure or food hunt for a motive.

RULE TWO — Equipment — Waterproof matches and —

For warmth, cheer, light and to attract attention, fire is probably the greatest single need of the lost person. So waterproofed matches MUST top the "MUST" list.

Then comes a good compass, a small waterproofed package of emergency rations, (which you must jealously guard against your appetite) a good pocket knife (how in the world can a man get along without a jack-knife in his pocket at all times!).

Sit down and think it over.



If snow covers the ground, you can back track.

With these things, a sketch of the country, matches, compass, emergency food and a knife, a temporarily "bumfuzzled" camper should not be hard put to find his way back to camp or habitation, or to exist for quite a while if his reckoning went wrong.

BUT, IF "LOST"

The first thing a person should do when he comes to the conclusion that he is temporarily "lost," is to sit down quietly, relax and think it over for ten minutes or more (Kephart thought thirty minutes better). This gives time to figure out a few things. Every woodsman and all authoritative books agree that sitting down for a spell is the first and best thing to do. As soon as the surprise and panic abates, a little looking around and figuring may solve the difficulty.

After a period of reflection and study with your compass, your watch—if it is "ticking" and very close to correct, and if you know how to use it to find direction—or the shadows to orient yourself, blaze a small tree nearby on four sides with your belt axe or pocket knife so that you can see it at a distance of 100 feet. Then walk straight out for 75 or a 100 feet in one direction, to the south, let's say, and then swing in a circle with your blazed tree as a hub. Observe the ground for trail marks, and the surroundings for familiar signs and for the camp itself. When the circle has been completed if you haven't found anything familiar, go back to your blazed tree. If by this time you have decided that the *way out* lies in a certain direction, you have a decision to make; either to wait where you are until found, to move out at once, or to stay where you are until morning and then move on. If darkness is but two hours or less away, the last alternative is the wisest. If there is plenty of time before sundown you should probably start at once. To wait for help to come to you is a good idea only if you are ill, injured, or exhausted, or know that you will be missed and that a searching party will be sent out.

Before you start out, whether it be immediately after the period

of reflection or early the next morning, *print* a note, if you have paper (or birch bark or piece of white cloth) and pencil, tell who you are, date it and fasten it to your blazed tree with four small hardwood wedges. Then pick a landmark in the direction you have chosen to go, a tall bare tree perhaps, and travel straight toward it. Mark your trail as you proceed, by blazing both sides of selected trees or breaking down branches or bushes, and letting them hang, so that you can sight back and maintain a straight line. When you arrive at your first landmark, pick a second one that lines up with the trail marks you have left, and go on. This is "bee lining out."

FINDING DIRECTION

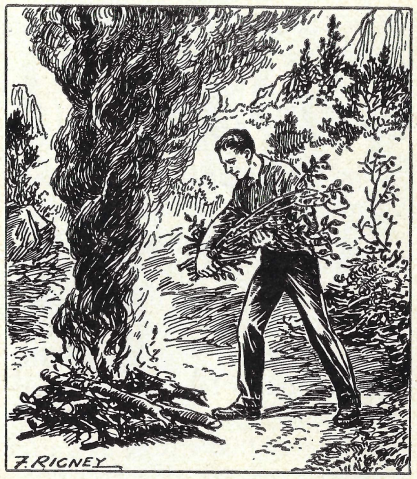
About the compass, let's say only "Get a good one — with a luminous dial if possible."

Your watch, unless more than an hour out of the way will show you the approximate South. (If you're on daylight saving time move your watch back one hour.) Point the hour hand at the sun and half-way between that hand and 12 o'clock should be within a few degrees of due south.

A master woodsman may, by averaging signs — moss on bark, lean of tree tops, and growth of vegetation or depth of snow on hillsides, — be able to find direction perfectly, but that's not for the uninitiated. In other words don't stake your life on someone's say-so, that moss always grows on the north side of a tree. It doesn't. It will probably be thickest on the side which is most exposed.

SIGNALS

Dense smoke by day or bright fire by night may attract attention of searchers or Forest Service men who are on the lookout for fires, so it is worth trying if the situation is serious. Care must be taken, of course, that the ground is cleared right down to mineral earth where the fire is to be made, to prevent the starting of a serious forest or grass fire.



Signal by smoky fire in daytime . . .

Green wood (use small stuff), ferns, grass, and live bushes will make a heavy smoke, but must be piled on the fire carefully to avoid putting it out.

Firing a gun to summon help — if done in the daytime — is not likely to get results if the hunting season is on; it is likely that many hunters may be firing at game. At night, however, gunfire means either trouble or illegal hunting. If a man is known to be lost, his signal may lead to his being found. Don't waste your ammunition. It shouldn't be necessary to fire three shots close together, as many books suggest. One at a time should do. If you do fire three, space them about four or five minutes apart and listen for answering shots. If your shot is answered, fire again but don't waste your ammunition. You may need it badly tomorrow.

Fire signal shots after dark.

. . . or a bright fire at night.

WHAT TO DO AT NIGHT

If a night must be spent away from camp, begin preparation early for spending it comfortably. Essentials are enough dry firewood to last through the night, with plenty of kindling to bring it up fast if it gets low, and a windbreak which will reflect the heat of your fire. A boulder, cut bank, snowbank with brush piled against it or crossed poles strung in between two trees and thatched with boughs or brush will serve as your windbreak reflector. The ground where you will lie down or half recline should be well

covered with boughs, dead ferns, or grass. This bed must be kept far enough away from the fire to avoid it being set aflame by soft-wood sparks.

If the night is cold, two fires may be necessary, or a fire may be built against a log which will serve as a reflector. The fire may have to be replenished occasionally during the night, but you don't need to build it extra large or keep awake to tend it — go to sleep and don't worry about freezing even if it is quite cold. If uncomfortable, you will wake up. Vilhjalmur Stefansson in his book *Arctic Manual* has this to say about going to sleep in cold weather:

"One of the hardest to eradicate of false beliefs is: 'When lost in a blizzard you must keep moving; you must not go to sleep, for if you do you will never wake again.'

"The principles to remember then are: Don't keep moving — keep still. Keep your clothes dry. Sleep as much as you can — because it both saves energy and passes time.

"So, if caught in a blizzard or lost in cold weather, don't be afraid to sleep. By pinching and punching yourself, by forcing yourself to keep awake, you use up energy that is needed to keep you warm. Through exercise and through panic your sweat glands start working and perspiration makes your clothing wet. When you are so worn out that you cannot keep awake any longer, exhausted and wet, you drop in your tracks and then you may never wake again."

YOU CAN'T ALWAYS 'FOLLOW A STREAM TO HABITATION'

This advice sometimes comes, without thinking, from experienced woodsmen. It is not always good. Streams frequently flow into great swamps or lakes which cannot be crossed, and take many hours to circle. A swamp may be a game paradise and a man trap with several streams feeding in and out of it. Usually, however, it is safe to assume that by following running water far enough a man will find other men. But let's not forget that while springs feed brooks and go on to eventually become rivers, that springs, brooks and streams also feed swamps, and uninhabited lakes and sometimes more swamps and lakes before the water eventually passes through inhabited territory.

Says James Rogers, Chairman of the Camping and Activities Committee, Adirondack Council:

"There is one phase of being lost that is never mentioned so far as I know, that is, when going down a mountain. Almost everyone hiking in mountain country hikes for the purpose of reaching the top of some peak. This is usually a well-defined trail to the top, but the top is bare. As a result when the person starts down the mountain, he or she misses the trail and continues on down in the dense growth. By following the old rules, such as "follow a stream to the nearest house," etc., they get into considerable trouble.

Build a fire and a windbreak.

For some reason, they never seem to have sense enough to turn around and go back to the top of the mountain.

"Whenever persons climb a mountain and are lost, the searching party usually looks all over the top to find them. If they will return to the top they will run into the searching party; but if they continue on down the mountain, they will end up in a swamp, nine times out of ten. Even though they don't run into the searching party, they are more likely to find the trail near the top, than by any other method they may use. This should be brought to the attention of the many hikers in our various resorts throughout the country."

FAITH

There is considerable evidence of the relation of faith to the maintenance of courage and the control of fear. Five-year-old Pamela Hollingsworth who was found after eight days on Mt. Chocorua in New Hampshire in October 1941, had complete faith in "Father — Mother — God," her parents stated.

The father of Don Fendler attributed Don's survival to faith in prayer. Don prayed and had no doubts. Perhaps it is such faith that causes the youngsters to come out alive so often while so many of the grownups lose heart and quit and die.

BOOKS

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